Table of Contents

Table of Contents

Fabric and Fibrous Systems Engineering

Research in the design, development, manufacture and measurement of fibrous structures including textiles, nonwovens, carpet, coated fabric, paper, preforms, etc.

Dyeing and Finishing Engineering

Research in dyeing, finishing and waste reduction in textile processes.

Table of Contents

Garment Engineering

Research in the design, development and manufacture of garments.

Intelligent Systems Engineering

Research in systems to enable rapid response, including computer modeling, sensor technology, expert systems, customer interactive design and demand-activated, closed-loop production systems.

Marketing Research

Table of Contents

Letter from the Editor

Starting with this quarterly report, we have described the objective and status of each National Textile Center project with only one-half page of text. In addition, we have provided a 1-2 line highlight of each project in the Table of Contents so that you can go quickly to the items that interest you most. This write-up is meant only as a starting point. We encourage you to contact the investigators directly for further information (their phone numbers are on the inside back cover) and consult the references cited. The research work at Auburn, Clemson, Georgia Tech and NC State, the four universities in the NTC research consortium, has resulted in well over 100 technical articles and presentations plus another 30 papers in preparation and over 25 theses completed with several more nearing completion. Over 130 students have been involved in these efforts.

Quarterly Report Organization

So you can more easily find items of interest to you and to facilitate technology transfer, I have organized this report in several different ways:

- **Table of Contents:** Research projects in the consortium cover the gamut from fiber spinning through yarn, fabric and garment manufacture to retail sales. The projects are organized into eight core competencies which are defined in the Table of Contents and in the body of the report.

- **Index by Project Management:** Project summaries are arranged according to which university has the lead management role. For multi-campus projects, the collaborating universities are listed in parentheses after the title.

- **Index by Topic:** This may be the easiest way to find what you're looking for. Notice the large number of projects, spread across the entire fiber-textile-apparel-retail industrial complex, that are using computer and mathematical modeling.

- **Index of Principal Investigators:** Over 100 principal investigators from the four universities are listed as contributors to the research projects and over one-third of them are contributing to more than one project. Also, the back cover lists by university each principal investigator with phone number.

Tom Doherty